

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Bickford, Randall L.

SERIAL NO.:

10/600,224

ART UNIT: 2121

FILED:

June 20, 2003

EXAMINER: Not Yet Assigned

FOR:

Surveillance System and Method having Parameter

Estimation and Operating

Mode Partitioning

To:

Commissioner For Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT BEFORE MAILING OF FIRST OFFICE ACTION UNDER 37 CFR 1.97(b)

The patents and publications listed on the appended PTO/SB/08A form (Substitute for form 1449A/PTO) reflect the state of the art of which applicant is currently aware. These references are included to fulfill the applicant's duty to disclose prior art. It is stipulated, however, that none of these references teach singly, nor render obvious when combined, the nexus of this invention as disclosed and as particularly claimed.

IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING INFORMATION DISCLOSURE STATEMENT

This information disclosure statement, including the attachments submitted herewith, are being filed before the mailing date of a first Office Action on the merits.

Dated: January 6, 2004

Respectfully Submitted:

Dennis A. DeBoo

Telephone: (916) 449-3983 Registration No.: 42,471

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet of 6

Complete if Known				
Application Number	10/600,224			
Filing Date	6/20/2003			
First Named Inventor	Bickford, Randall L.			
Group Art Unit	2121			
Examiner Name	Not yet Assigned			
Attorney Docket Number	23404-cpa			

	U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	U.S. Patent I	Document Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	1	4,295,128		Hashemian et al.	10-13-1981			
	2	4,478,783		Broadwater	10-23-1984			
	3	4,761,748		Le Rat et al.	08-02-1988			
	4	4,937,763		Mott	06-26-1990			
	5	4,975,968		Yukl, Tex	12-04-1990			
	6	5,009,833		Takeuchi et al.	04-23-1991			
	7	5,223,207		Gross et al.	06-29-1993			
	8	5,274,572		O'Neil et al.	12-28-1993			
	9	5,381,140		Kuroda, et al.	01-10-1995			
	10	5,392,320		Chao	02/21/1995	·		
	11	5,402,521		Niida et al.	03-28-1995			
	12	5,410,492		Gross et al.	04-25-1995			
	13	5,459,675		Gross et al.	10-17-1995			
	14	5,465,321		Smyth	11-07-1995			
	15	5,506,794		Lange	04-09-1996			
	16	5,586,066		White et al.	12-17-1996			
	17	5,602,886		Gross et al.	02-11-1997			
	18	5,629,872		Gross et al.	05-13-1997			
	19	5,661,735		Fischer	08-26-1997			
	20	5,680,409		Qin et al.	10-21-1997			

	FOREIGN PATENT DOCUMENTS							
Examiner	Cite		Foreign Patent Do	Kind Code ⁵	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	
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Sheet 2 of |6

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	21	5,706,321	Chen et al.	06-06-1998	-			
	22	5,740,033	Wassick et al.	04-14-1998	···			
	23	5,745,382	Vilim et al.	04-28-1998				
	24	5,761,090	Gross et al.	06-02-1998				
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	28	5,864,773	Barna et al.	06-26-1999				
	29	5,877,999	Holt, et al.	03-02-1999				
	30	5,950,147	Sarangapani et al.	09-07-1999				
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	33	6,016,465	Kelly	01-18-2000				
	34	6,073,262	Larkin, et al.	06-06-2000				
				 				
		 		 				
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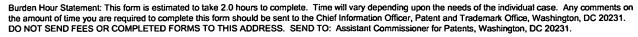
Complete if Known					
Application Number					
Filing Date					
First Named Inventor	Bickford, Randall L.				
Group Art Unit					
Examiner Name					
Attorney Docket Number	23404-cpa				

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¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.



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TATEMENT BY APPLICANT			APPLICANT	First Named Inventor	Bickford, Randall L.		
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Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ²
. ✓	46	BICKFORD, R.L., et al, Real-Time Space Shuttle Main Engine Sensor Validation, National Aeronautics and Space Administration, August 1995, Printed in USA by ExperTech & Intelligent Software Associates, Inc.	
_/	,47	BICKFORD, R.L., et al, Real-Time Flight Data Validation For Rocket Engines, AIAA, 1996, Printed in USA by ExperTech & NYMA, Inc.	
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/	49	BICKFORD, R.L., et al, Real-Time Sensor Validation For Propulsion Systems, American Institute of Aeronautics and Astronautics, 1998, Printed in USA by Expert Microsystems, Inc & Dynacs Engineering Co.	
√	50	BICKFORD, R.L., et al, Real-Time Sensor Data Validation For Space Shuttle Main Engine Telemetry Monitoring, AIAA, June 1999, Printed in USA by Expert Microsystems, Inc.& Intelligent Software Associates, Inc. & Dynacs Engineering Company & NASA Glenn Research Center	
V	51	MOTT, J.E., et al, EBR-II System Surveillance Using Pattern Recognition Software, ANS/ENS Mtg. on Operability of Nuclear Power Systems, September 1986, Printed in USA by Saratoga Engineering Consultants and Argonne National Laboratory	
/	52	MOTT, J.E., et al, A Generalized System State Analyzer for Plant Surveillance, ANS/ENS Mtg. on Artificial Intelligence Applications in the Nuclear Industry, August 1987, Printed in USA by EI International, Inc. and Argonne National Laboratory	
V	53	MOTT, J.E., et al, Pattern-Recognition Software for Plant Surveillance, ANS Transactions, 1987, Printed in USA by the American Nuclear Society	
	54	MOTT, J.E., et al, Pattern-Recognition Software for Plant Surveillance, ANS Intl. Mtg. on Nuclear Power Plant Operation, August 1987, Printed in USA by El International, Inc. and Argonne National Laboratory	
	55	MOTT, J.E., et al, Pattern-Recognition Software Detecting the Onset of Failures In Complex Systems, 42nd Mtg. of Mech. Failures Prevention Group, September 1987, Printed in USA by EI International, Inc. and Argonne National Laboratory	
$\sqrt{}$	56	KING, R.W., et al, Pattern-Recognition System Application to EBR-II Plant-Life Extension, ANS Mtg. on Nuclear Power Plant Life Extension, July 1988, Printed in USA by Argonne National Laboratory and El International, Inc.	

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Signature	 Considered	

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heet	5 of 6	Attorney Docket Number	23404-cpa		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Cite Examiner item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), Initials' No.1 publisher, city and/or country where published. SINGER, R.M., et al, Use of a Pattern Recognition Scheme to Compensate for Critical Sensor Failures, 1st Intl. Machinery Monitoring and Diagnostic Conf., September 1989, Printed in USA by Argonne National Laboratory MOTT, J.E., et al, A Universal, Fault Tolerant, Non-Linear Analytic Network for Modeling and Fault Detection, 8th Power Plant Dynamics, Control & Testing Symposium, May 1992, Printed in USA by Advanced Modeling **Techniques Corporation and Argonne National Laboratory** MOTT, J.E., et al, Feedwater Flow Estimation via Sample-Based Modeling, 8th Power Plant Dynamics, 59 Control & Testing Symposium, May 1992, Printed in USA by Advanced Modeling Techniques Corporation and Northeast Utilities HARRIS, T.J., et al, Empirical Models for Intelligent Data Validation, 35th POWID Symposium, June 1992, Printed in USA by Halliburton NUS and Entergy Operations, Inc. HUANG, C., et al, Inference in Belief Networks: A Procedural Guide, Intl. Journal of Approximate Reasoning, 11:1-45, 1994, Printed in USA by Elsevier Science, Inc. 61 SINGER, R.M., et al, A Pattern-recognition-based, Fault-tolerant Monitoring and Diagnostic Technique, 7th Symp. on Nuclear Reactor Surveillance, June 1995, Printed in USA by Argonne National Laboratory 62 SINGER, R.M., et al, Power Plant Surveillance and Fault Detection: Applications to a Commercial PWR, Intl. Atomic Energy Commission, IAEA-TECDOC-1054, pp. 185-200, September 1997, Printed in USA by Argonne National Laboratory MIRON, A., et al, The Effects of Parameter Variation on MSET Models of the Crystal River-3 Feedwater Flow System, ANS Annual Meeting, June 1998, Printed in USA by Argonne National Laboratory BICKFORD, R.L., et al, Sensor Validation Tools and SSME Network, Final Report, April 2000, Printed in USA 65 by Expert Microsystems, Inc. ZAVALJEVSKI, N., et al, Support Vector Machines for Nuclear Reactor State Estimation, ANS Topical Mtg. on Advances in Reactor Physics, May 2000, Printed in USA by Argonne National Laboratory 66 HANSEN, E.J., et al, Similarity Based Regression: Applied Advanced Pattern Recognition for Power Plant Analysis, 1994 EPRI Heat Rate improvement Conference. Printed in USA by Performance Consulting 67 Services, Inc.

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